OIPE
SEP 0 8 2005
PATENT & TRADEMARK OFFICE

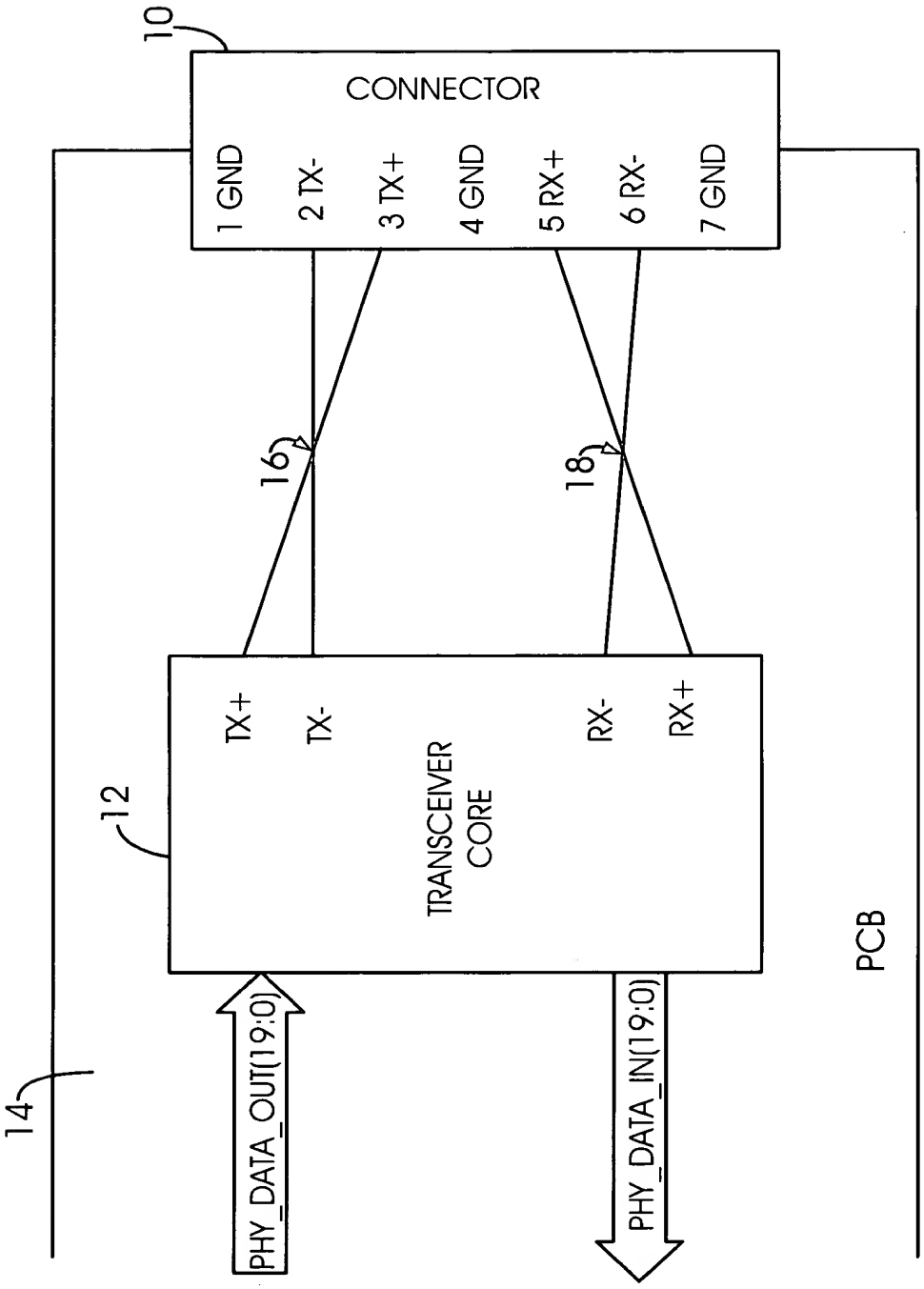

Figure 1

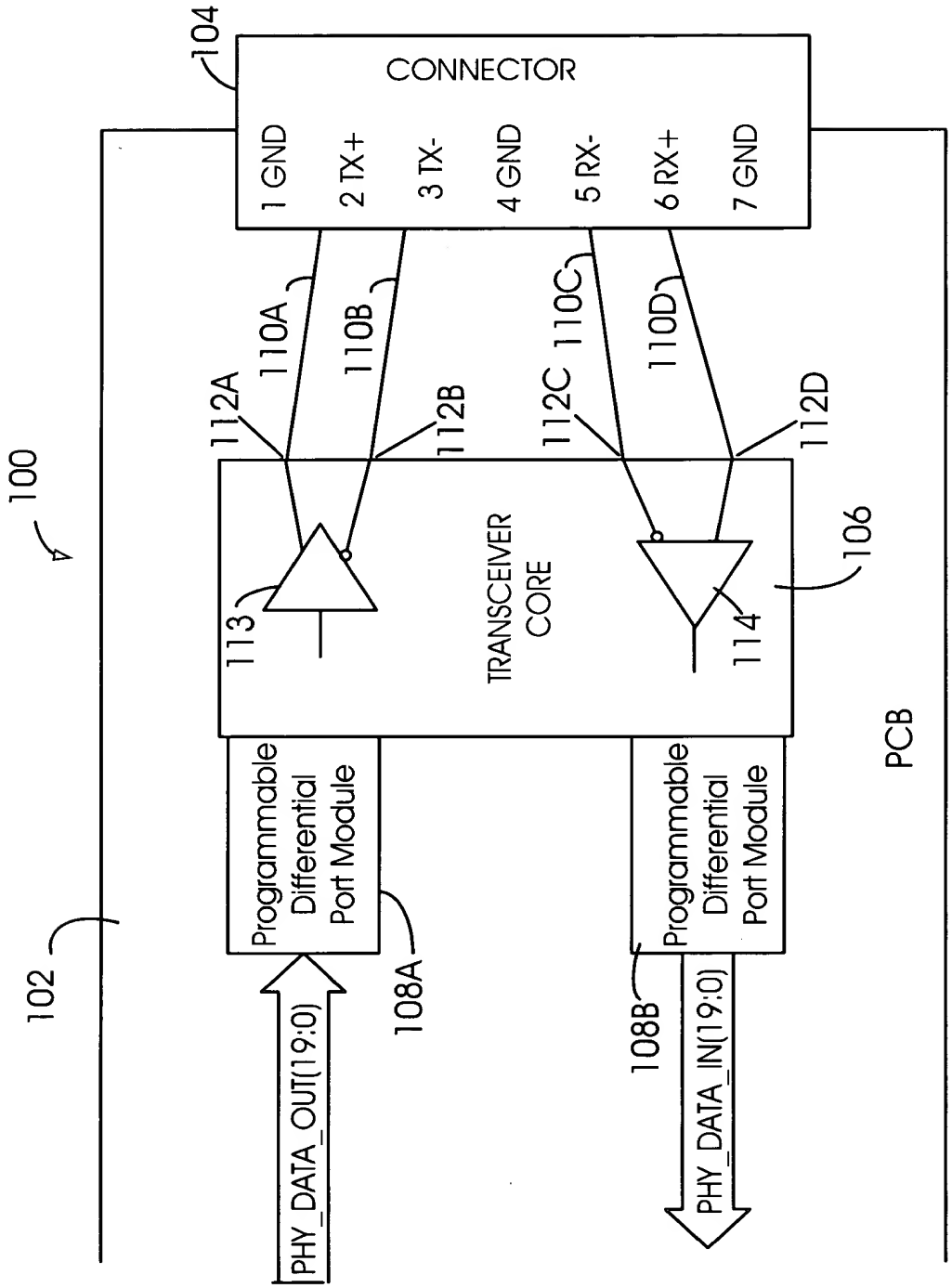
100
102
104
CONNECTOR
1 GND
2 TX+
3 TX-
4 GND
5 RX-
6 RX+
7 GND
110A
110B
110C
110D
112A
112B
112C
112D
113
114
106
TRANSCEIVER CORE
Programmable Differential Port Module
Programmable Differential Port Module
108A
108B
PHY_DATA_OUT(19:0)
PHY_DATA_IN(19:0)
PCB

Figure 2

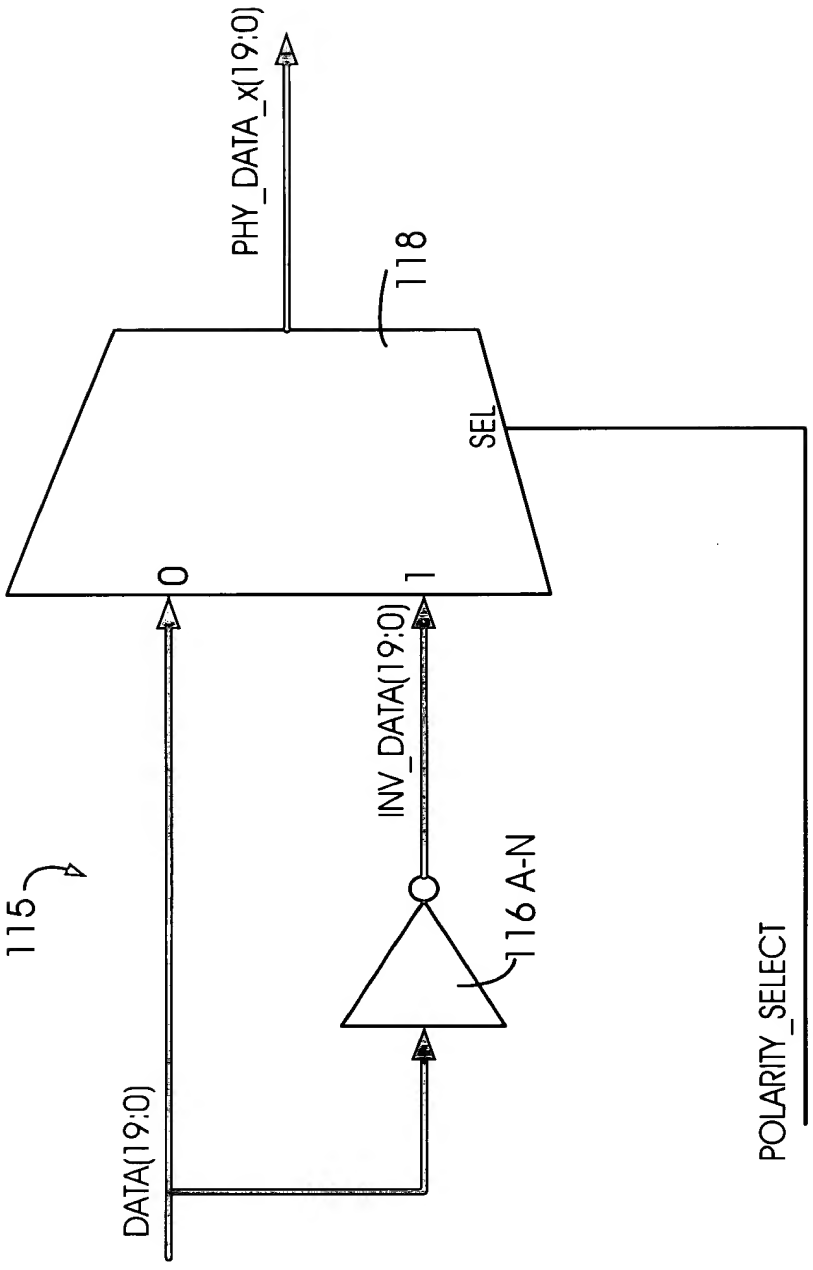
PHY_DATA_x(19:0)
118
SEL
0
1
INV_DATA(19:0)
115
116 A-N
DATA(19:0)
POLARITY_SELECT

Figure 3

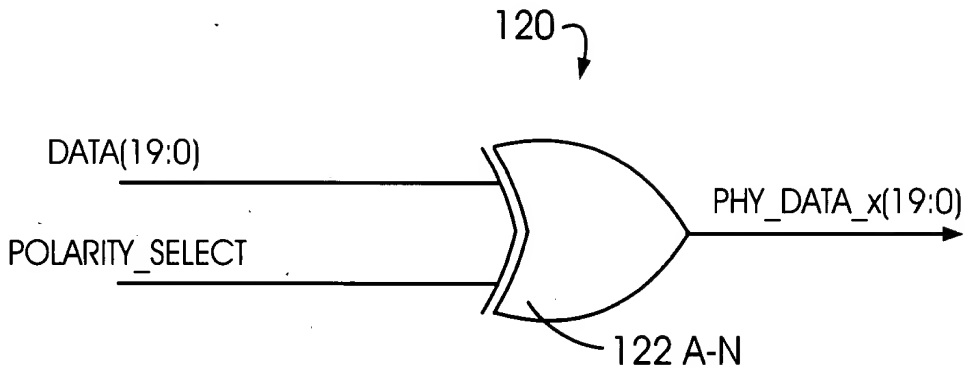

Figure 4

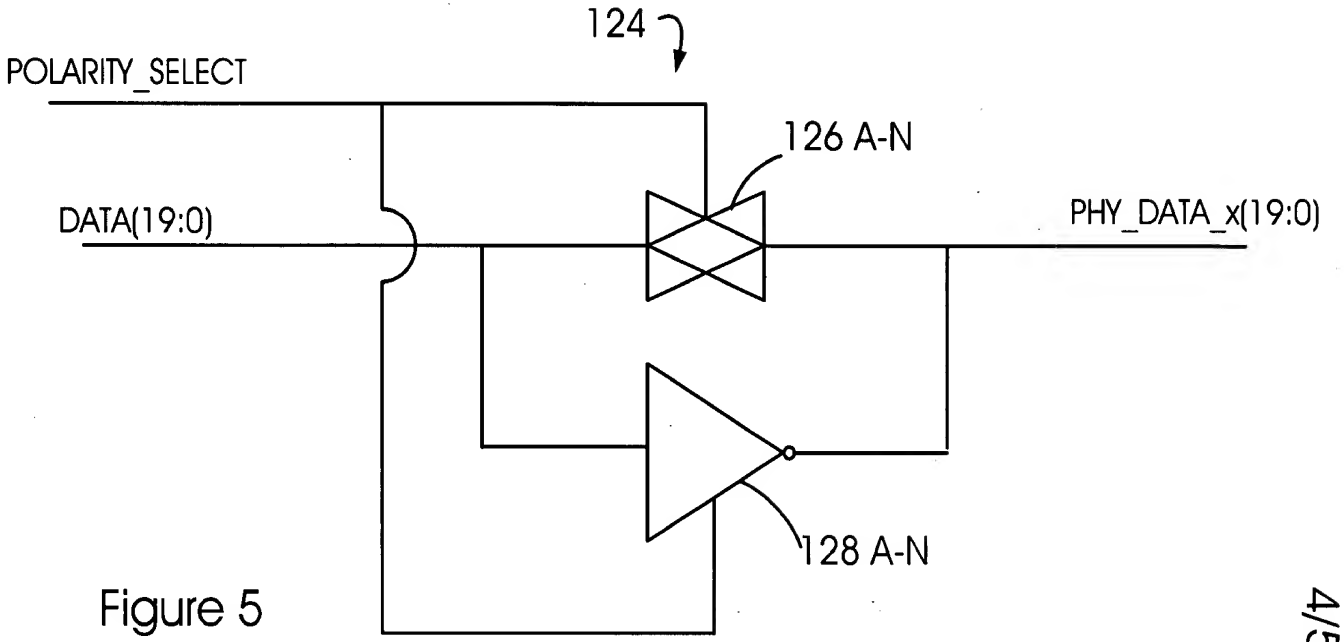

Figure 5

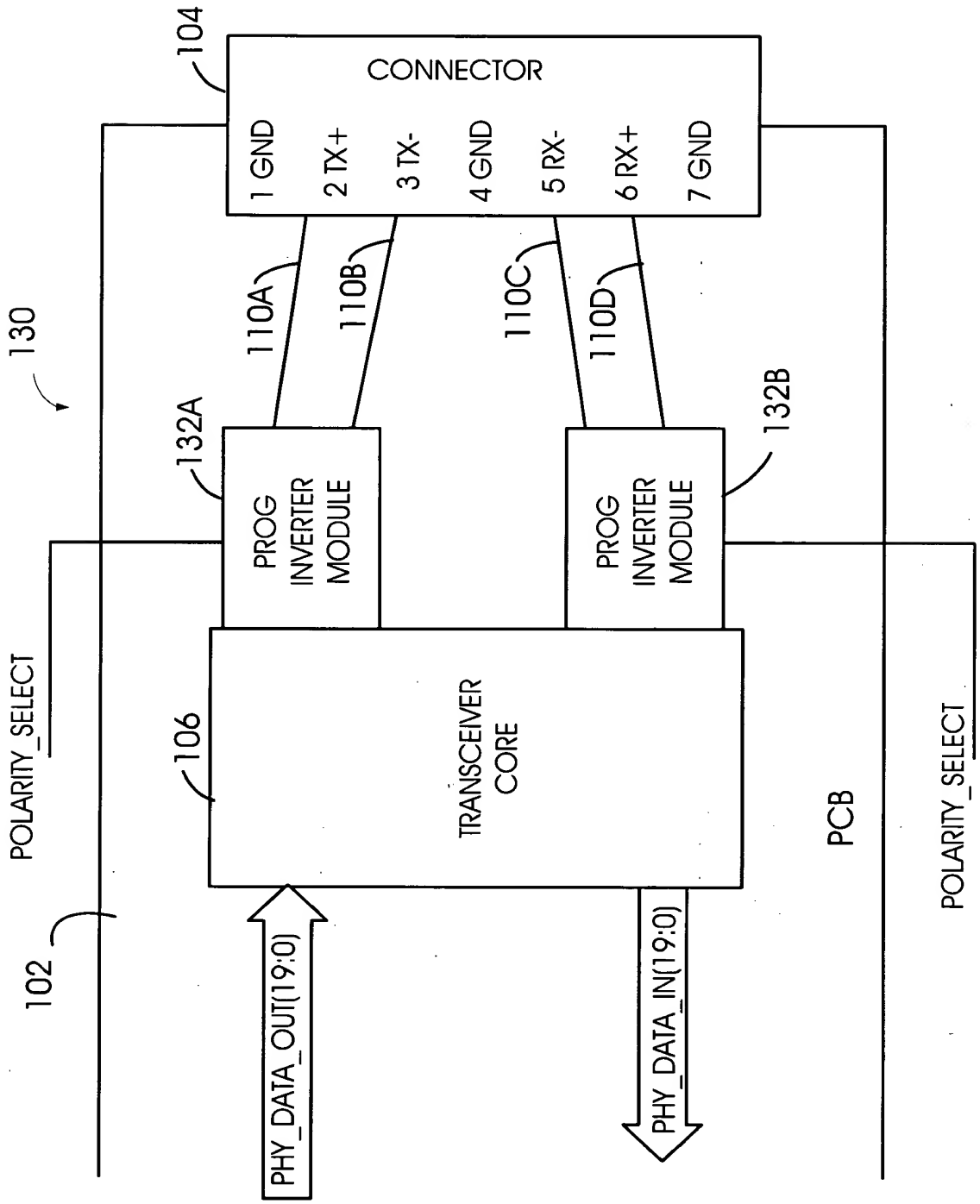
104
CONNECTOR
1 GND
2 TX+
3 TX-
4 GND
5 RX-
6 RX+
7 GND
110A
110B
110C
110D
130
132A
132B
PROG INVERTER MODULE
PROG INVERTER MODULE
106
TRANSCEIVER CORE
POLARITY_SELECT
102
PHY_DATA_OUT(19:0)
PHY_DATA_IN(19:0)
PCB
POLARITY_SELECT

Figure 6